Amendments to the Claims

<u>Listing of Claims:</u>

1. A programmable interface apparatus for connecting one of a plurality of industrial machines having different data format and storage configurations and different electrical interface characteristics to a communications medium for remote monitoring and control comprising:

(a) a memory for storing data in predetermined locations and in a predetermined format, and for storing <u>both electrical interface configuration information and data translation</u> configuration information relating to the at least one of the industrial machines;

(b) a configurable electrical interface adapted to be directly connected to one of the industrial machines and responsive to the configuration information for configuring the electrical interface characteristics of the electrical interface in response to the <u>stored electrical interface</u> configuration information relating to at least one of the plurality of industrial machines for receiving machine data from the industrial machine and sending data to the industrial machine;

(c) a <u>configurable</u> data translator responsive to the stored <u>data translation</u> configuration information, receiving data from the interface and transforming the data to the predetermined format;

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(d) a processor responsive to the configuration information for reading data from and writing data to the predetermined locations in the memory; and

(e) a communications port connected to the communications medium.

2. The programmable interface apparatus of claim 1, in which the information relating to the industrial machine includes data transform information, and the data translator is responsive to the data transform information.

3. The programmable interface apparatus of claim 1, further comprising a display coupled to the processor for displaying the data to a user.

4. The programmable interface apparatus of claim 1, in which the memory storing configuration information is non-volatile memory.

5. The programmable interface apparatus of claim 4, in which the memory storing configuration information is removable memory.

6. The programmable interface apparatus of claim 1, further comprising a configuration processor separate from the apparatus and removably connectable to the apparatus for processing configuration information and loading the configuration information into the memory.

7. The programmable interface apparatus of claim 1, in which the configuration information comprises configuration information for a plurality of industrial machines.

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8. A method of connecting one of a plurality of industrial machines having different data format and storage configurations <u>and different electrical interface characteristics</u> to a communications medium for remote monitoring and control, the method comprising:

(a) storing data in predetermined locations and in a predetermined format, and storing <u>both electrical interface configuration information and data translation</u> configuration information relating to the at least one of the industrial machines in a memory;

(b) configuring an electrical interface for direct connection to at least one of the industrial machines in response to the <u>stored electrical interface</u> configuration information and directly connecting the interface to the ~~machine~~ <u>machine;</u>

(c) receiving machine data from the industrial machine and sending data to the industrial machine ~~through a~~ <u>through the</u> configurable directly connectable electrical interface responsive to the configuration information;

(d) <u>configuring a data translator in response to the stored data translation configuration information for</u> receiving data from the interface and transforming the data to the predetermined format ~~in a~~ <u>the</u> data translator responsive to the <u>data translation</u> configuration information;

(e) reading data from and writing data to the predetermined locations in the memory with a processor responsive to the <u>data translation</u> configuration information; and

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(f) connecting a communications port to the communications medium.

9. The method of Claim 8, further comprising including data transform information in the information relating to the industrial machine, and the ~~responding the~~ data translator is responsive to the data transform information.

10. The method of claim 8, further comprising coupling a display to the processor for displaying the data to a user.

11. The method of claim 8, further comprising storing the configuration information in a non-volatile memory.

12. The method of claim 11, further comprising removing the memory storing configuration information.

13. The method of claim 8, further comprising processing both electrical interface configuration information and data translation configuration information and loading the configuration information into the memory in a configuration processor separate from the apparatus and removably connectable to the apparatus.

14. The method of claim 8, further comprising retaining both electrical interface configuration information and data translation ~~configuration information~~ for a plurality of industrial machines in the configuration information.